**BEST AVAILABLE COPY****FAX TRANSMISSION****DATE:** July 1, 2005**PTO IDENTIFIER:** Application Number 10/040281-Conf. #9658  
Patent Number**Inventor:** Jeffrey L. BROWNING et al.**MESSAGE TO:** US Patent and Trademark Office**FAX NUMBER:** (703) 746-4000**FROM:** LAHIVE & COCKFIELD, LLP

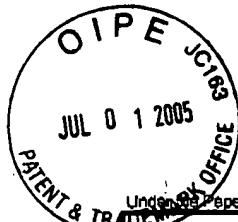
Cristin E. Howley, Ph.D.

**PHONE:** (617) 227-7400**Attorney Dkt. #:** BGNB129CP2DV2CN**PAGES (Including Cover Sheet):** 31**CONTENTS:** Transmittal (1 page)  
Communication (2 pages)  
Copy of Information Disclosure Statement filed July 2, 2002 (26 pages)  
Certificate of Transmission (1 page)

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PTO/SB/21 (08-04)  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/040281-Conf. #9658
Filing Date	November 7, 2001
First Named Inventor	Jeffrey L. BROWNING
Art Unit	1635
Examiner Name	S. McGarry
Attorney Docket Number	BGNB129CP2DV2CN

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	<ul style="list-style-type: none"> <li>- Communication</li> </ul>
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	<ul style="list-style-type: none"> <li>- Copy of Information Disclosure Statement mailed 7/2/02</li> </ul>
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Landscape Table on CD	<ul style="list-style-type: none"> <li>- Fax Cover Sheet</li> </ul>
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<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

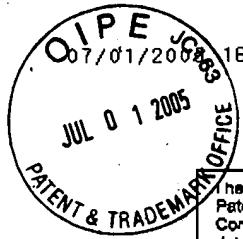
Firm Name	LAHIVE & COCKFIELD, LLP		
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Printed name	Cristin E. Howley, Ph.D.		
Date	July 1, 2005	Reg. No.	55,281

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(Cristin E. Howley, Ph.D.)

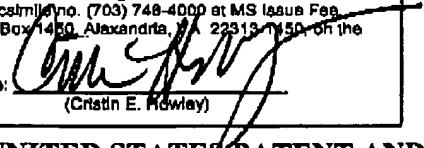


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(Cristin E. McWayne)

Docket No.: BGNB129CP2DV2CN  
(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Jeffrey L. Browning *et al.*

Application No.: 10/040281

Confirmation No.: 9658

Filed: November 7, 2001

Art Unit: 1635

For: *Lymphotoxin-B, Lymphotoxin-B Complexes, Pharmaceutical Preparations And Therapeutic Uses Thereof*

Examiner: S. McGarry

MS Issue Fee  
P.O. Box 1450  
Alexandria, VA 22313-1450

### COMMUNICATION

Dear Sir:

Upon receipt of the Notice of Allowance, the file for the above-referenced case was reviewed and it was noted that a copy of PTO Form 1449 initialed by the Examiner had not been received. In a conversation with the Examiner, Applicants' agent was informed that the Patent Office had not received the Information Disclosure Statement dated July 2, 2002.

Enclosed please find a copy of the Information Disclosure Statement mailed July 2, 2002 to the Patent Office, including a copy of the Information Disclosure Statement, Transmittal Form, PTO Form 1449 (including Forms PTO/SB/08A and PTO/SB/08B), Supplemental Communication, International Search Report from a counterpart foreign application, Certificate of Mailing, and Return Postcard.

Application No.: 10/040281

Docket No.: BGNB129CP2DV2CN

Applicants respectfully request entry of these documents and consideration by the Examiner. Following consideration, Applicants request that the Examiner forward to Applicants' attorney an initialed copy of PTO Form 1449.

Dated: July 1, 2005

Respectfully submitted,

By

Cristin E. Howley

Registration No.: 55,281

LAHIVE &amp; COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

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Agent For Applicant

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Title: Lymphotoxin-Beta, Lymphotoxin-Beta Complexes, Pharmaceutical Preparations And Therapeutic Uses Thereof  
 Serial No. 10/040281 Applicant: Browning et al.

In the above matter, the following have been received by the US Patent and Trademark Office on the date stamped hereon.

Express Mail Label No. \_\_\_\_\_  
 Application incl. \_\_\_\_\_ pages  
 \_\_\_\_\_ pp. of specification  
 \_\_\_\_\_ pp. of claims (# of claims-\_\_\_\_\_  
 \_\_\_\_\_ pp. of abstract  
 \_\_\_\_\_ sheets of drawings; Figs. \_\_\_\_\_  
 Provisional Application Cover Sheet  
 Declaration/Power of Attorney (Unsigned)  
 Copy of Notice to File Missing Parts  
 Request for filing RCE  
 IDS, PTO-1449 and \_\_\_\_\_ references (Supp.\_\_\_\_\_)

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 Petition for \_\_\_\_\_ month extension of time  
 Assignment and Cover Sheet  
 Amendment (Preliminary After Final)  
 Notice of Appeal  
 Appellant's Brief(triplicate)(Reply Brief)  
 Letter to Chief Draftsperson  
 Issue Fee  
 Transmittal Letter  
 Deposit Account Authorization # 02-2327

Other: IDS - Supplemental Communication  
 Other: Copy of Int'l Search Report

Mailing Date: July 1, 2002 Docket No. B129CIP2DIV2CON Atty/asst: NDC/jlm



PATENT ADMINISTRATOR  
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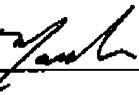
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on July 2, 2002  
 Date

  
 Signature

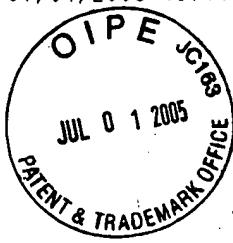
Jacqueline L. Marlier

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

1. PTO Form 1449 (8 pgs.)
2. Information Disclosure Statement Transmittal Form (3 pgs.);
3. General Transmittal Form (1 pg.);
4. IDS - Supplemental Communication (1 pg.);
5. Copy of International Search Report from a counterpart foreign application (8 pgs.);
5. Return Receipt Postcard

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## TRANSMITTAL FORM

*(to be used for all correspondence after initial filing)*

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	<b>Application Number</b> 10/040,281
	<b>Filing Date</b> 11/07/2001
	<b>First Named Inventor</b> Browning, Jeffrey
	<b>Group Art Unit</b> 1635
	<b>Examiner Name</b> TBD
<b>Total Number of Pages in This Submission</b> 22	<b>Attorney Docket Number</b> B129USCP2DV2CO

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavit/declaration(s)	<input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/68) and Accompanying Petition	<input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement	<input type="checkbox"/> Additional Enclosure(s) (please identify below) <input checked="" type="checkbox"/> PTO Form 1449 <input type="checkbox"/> IDS - Supplemental Communication <input type="checkbox"/> Copy of Int'l Search Report
<input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application	<input type="checkbox"/> Request for Refund	<input type="checkbox"/> Remarks
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

The Commissioner is hereby authorized to charge any additional fees to Deposit Account No. 02-2327

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or individual name	Niki D. Cox, Esq. Reg. No. 42,446		
Signature			
Date	July 2, 2002		

**CERTIFICATE OF MAILING**

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Typed or printed name	Jacqueline L. Marlier		
Signature		Date	July 2, 2002

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Docket No.: B129 CIP2DIV2CON

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Examiner: TBD

Browning et al.

Group Art Unit: 1635

Serial No.: 10/040,281

Filing Date: November 7, 2001

For: LYMPHOTOXIN- $\beta$ , LYMPHOTOXIN- $\beta$  COMPLEXES,  
PHARMACEUTICAL PREPARATIONS AND THERAPEUTIC USES  
THEREOF

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July 2, 2002  
Date

Jacqueline L. Marler

## SUPPLEMENTAL COMMUNICATION

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The attached Information Disclosure Statement submitted herewith is being filed before the mailing date of a first Office Action on the merits and therefore no fee is due. In an abundance of caution, however, the Assistant Commissioner is hereby authorized to charge Deposit Account No. 02-2327 for any unforeseen fee that may be due.

If the Examiner believes that consideration of the application, or of any matter related to this submission, would be facilitated by a telephone conference with

#10788

Applicants' attorney, the Examiner is urged to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

Date: July 2, 2002

Niki D. Cox

Niki D. Cox, Esq.  
Reg. No. 42,446  
BIOGEN, INC.  
14 Cambridge Center  
Cambridge, MA 02142  
(617) 679-2079 (Direct)  
(617) 679-2838 (Facsimile)

#10788



Docket No.: B129 CIP2DIV2CON

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Examiner: TBD

Browning et al.

Group Art Unit: 1635

Serial No.: 10/040,281

Filing Date: November 7, 2001

For: LYMPHOTOXIN- $\beta$ , LYMPHOTOXIN- $\beta$  COMPLEXES, PHARMACEUTICAL PREPARATIONS AND THERAPEUTIC USES THEREOF

## CERTIFICATE OF MAILING BY 'FIRST CLASS MAIL'

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July 2, 2002

Jacqueline L. Marlier

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted:

under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)

under 37 CFR 1.97(b), or

(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an International application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

under 37 CFR 1.97(c) together with either:

a Statement under 37 CFR 1.97(e), as checked below, or

a \$180.00 fee under 37 CFR 1.17(p), or

(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

under 37 CFR 1.97(d) together with:

a Statement under 37 CFR 1.97(e), as checked below, and

a \$180.00 fee under 37 CFR 1.17(p), or

(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

under 37 CFR 1.97(i):

Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.

(Filed after payment of issue fee)

-2-

Statement Under 37 CFR 1.97(e)

- Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

- Enclosed herewith is form PTO-1449:

- Copies of the cited references are enclosed.
- Copies of cited references are not enclosed; said references were cited in prior application, U.S. Application No. 07/990,304, to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
  - the explanation provided on the attached sheet.
  - the explanation provided in the Specification.
  - submission of the enclosed International Search Report.
  - the enclosed English language abstract.

-3-

Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]  
 U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]  
 U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

Examiner

Date

A copy of each above-cited application, including the current claims, is enclosed.  
 A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

## Method of payment:

A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.  
 Please charge Deposit Account 02-2327 in the amount of \$[ ]. A copy of this Statement is enclosed.  
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Respectfully submitted,

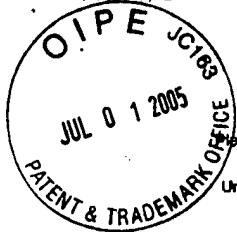
BIOGEN, INC.

Date: July 2, 2002

Niki D. Cox

Niki D. Cox, Esq.  
Reg. No. 42,446  
BIOGEN, INC.  
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Cambridge, MA 02142  
(617) 679-2079 (Direct)  
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<p>Substitute for Form 1449AP/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<p><b>Complete If Known</b></p>	
Sheet	1	of	8	Application Number	10/040,281
				Filing Date	11/07/2001
				First Named Inventor	Browning, Jeffrey
				Group Art Unit	TBD
				Examiner Name	TBD
				Attorney Docket Number	B129USCP2DV2CO

U.S. PATENT DOCUMENTS

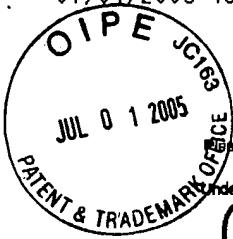
## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kind of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

2 of 8

Complete If Known

Application Number	10/040,281
Filing Date	11/07/2001
First Named Inventor	Browning, Jeffrey
Group Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	B129USCP2DV2CO

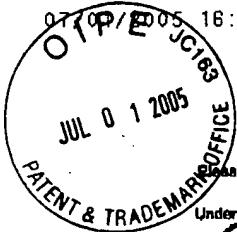
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume- issue number(s), publisher, city and/or country where published.
	C1	Y. Abe et al., "Expression of Membrane-Associated Lymphotoxin/Tumor Necrosis Factor-Beta on Human Lymphokine Killer Cells", Jpn. J. Canc. Res., 82, pp. 23-26. (1991).
	C2	Y. Abe et al., "Studies of Membrane-Associated and Soluble (Secreted) Lymphotoxin in Human Lymphokine-Activated T-Killer Cells in Vitro", Lymphokine and Cytokine Research, Vol. 11, pp. 115-121, (1992).
	C3	Abersold et al., "Internal Amino Acid Sequence Analysis of Proteins Separated by One- or Two-Dimensional Gel Electrophoresis After in situ Protease Digestion on Nitrocellulose", PNAS, Vol. 84, pp. 6970-6974, (1987).
	C4	B. Aggarwal et al., "Primary Structure of Human Lymphotoxin Derived from 1788 Lymphoblastoid Cell Line", J. Biol. Chem., Vol. 260, No. 4, pp. 2334-2344, (1985).
	C5	M. Akashi et al., "Lymphotoxin: Stimulation and Regulation of Colony-Stimulating Factors in Fibroblasts", Blood, 74, No. 7, pp. 2383-2390, (1989).
	C6	W.F. Anderson, "Human Gene Therapy", Science, Vol. 256, pp. 808-813 (1992).
	C7	U. Anderson et al., "Characterization of Individual Tumor Necrosis Factor alpha- and beta-Producing Cells after Polyclonal T Cell Activation", J. of Immun. Meth., 123, pp. 233-240, (1989).
	C8	J.S. Andrews et al., "Characterization of the Receptor for Tumor Necrosis Factor (TNF) and Lymphotoxin (LT) on Human T Lymphocytes", J. Immun., Vol. 144, No. 7, pp. 2528-2591, (1990).
	C9	Androlewicz et al., "Lymphotoxin is Expressed as a Heteromeric Complex with a Distinct 33-kDa Glycoprotein on the Surface of an Activated Human T Cell Hybridoma", Journal of Biological Chemistry, 267, No. 4, pp. 2542-2547, (1992).
	C10	R. Armitage et al., "Molecular and Biological Characterization of a Murine Ligand for CD40", Nature, Vol. 357, pp. 80-82, (1992).
	C11	K. Badenhoop et al., "TNF-alpha Gene Polymorphisms in Type 1 (insulin-Dependent) Diabetes Mellitus", Diabetologia, 32, 445-448, (1989).

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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PTC/SB/08B (10-96)

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for Form 1449B/PTO		Complete If Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Application Number	10/040,281
Sheet	3	Filing Date	11/07/2001
		First Named Inventor	Browning, Jeffrey
		Group Art Unit	TBD
		Examiner Name	TBD
		Attorney Docket Number	B129USCP2DV2CO

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

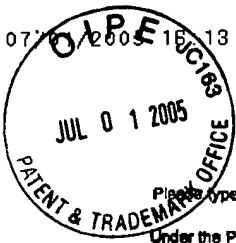
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	C12	B. Boutilier et al., "The History, Properties, and Biological Effects of Cachectin", <i>Biochemistry</i> , Vol. 27, No. 20, pp. 7575-7582, (1988).	
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Application Number	10/040,281
Filing Date	11/07/2001
First Named Inventor	Browning, Jeffrey
Group Art Unit	TBD
Examiner Name	TBD

Attorney Docket Number

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	C33	M. Kinkhabwala et al., "A Novel Addition to the T Cell Repertoire", J. Exp. Med., Vol. 171, pp. 941-946, (1990).	

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Application Number	10/040,281
Filing Date	11/07/2001
First Named Inventor	Browning, Jeffrey
Group Art Unit	TBD
Examiner Name	TBD

Attorney Docket Number

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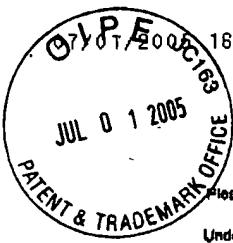
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C34	M. Kriegler et al., "A Novel Form of TNF/Cachectin is a Cell Surface Cytotoxic Transmembrane Protein: Ramifications for the Complex Physiology of TNF", Cell, Vol. 53, pp. 45-53, (1988).		
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C41	N. Paul et al., "Lymphotoxin", Ann. Rev. Immunol., 6, pp. 407-438, (1988).		
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C43	D. Pennica et al., "Human Tumor Necrosis Factor: Precursor Structure, Expression and Homology to Lymphotoxin", Nature, Vol. 312, pp. 724-729, (1984).		
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### Complete If Known

Application Number	10/040,281
Filing Date	11/07/2001
First Named Inventor	Browning, Jeffrey
Group Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	B129USCP2DV2CO

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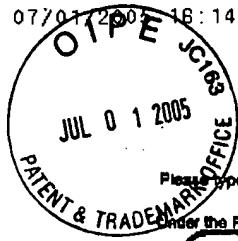
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	C45	P. Pociot et al., "A Tumor Necrosis Factor beta Gene Polymorphism in Relation to Monokine Secretion and Insulin-Dependent Diabetes Mellitus", Scand. J. Immunol., 33, pp. 37-49, (1991).	
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	C52	N. Ruddle et al., "The Role of Lymphotoxin in Inflammation", Prog. Allergy, Vol. 40, pp. 162-182, (1988).	
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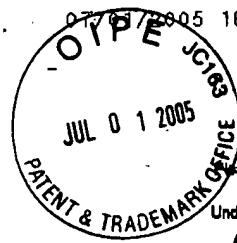
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C62		M. Turner et al., Human T Cells from Autoimmune and Normal Individuals can Produce Tumor Necrosis Factor", Eur. J. Immun., 17, pp. 1807-1814 (1987).	
C63		E. Tschachler et al., "Human Retrovirology: Constitutive Expression of Lymphotoxin (Tumor Necrosis Factor beta) in HTLV-1-Infected Cell Lines", Raven Press, pp. 105-113, (1990).	
C64		R. Watanabe-Pukunaga et al., "Lymphoproliferation Disorder in Mice Explained by Defects in Fas Antigen that Mediates Apoptosis", Nature, 356, pp. 314-317, (1992).	
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		Group Art Unit	TBD
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